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Garrison, J. G.

The French system of
exercises for lalés.

Brit. med. journ., 1911.

GARSON



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of early diagnosis, that they even presume to condemn my system of tuberculin dispensaries because I make early diagnosis by means of tuberculin an essential and indispensable feature of these institutions? When I urge the supreme importance of employing tuberculin in diagnosis at these special dispensaries, I am following the lead of such men as Koch, Cornet, Petruschsky, Spengler, Moeller, Pfuhl, Krause, Turban, Behring, Mitulescu, Roepke, Bandler, and hosts of others. Surely, those of us who have fearlessly investigated this important phase of practical medicine are safer guides than those who presume to judge without such investigations. Until the medical profession seriously recognize the enormous value of tuberculin in the diagnosis of early tuberculosis, we shall be only too familiar with the catastrophes that must follow this disregard of the most valuable weapon we possess in detecting pulmonary tuberculosis in the stage when treatment is likely to be successful. There are few sanatoriums in Germany where this use of tuberculin is not fully recognized. There are, unfortunately, too few sanatoriums in England where tuberculin is thus employed.

THEORY OF INTOXICATION.

These authors, misled by their views of "auto-intoxication," assume that in the progressive stages of pulmonary tuberculosis there is progressive intoxication of the system by means of tuberculin. This theory begs the whole question and presents a one-sided and wholly inadequate idea of the tuberculous process. The element of infection and the presence of living, virulent bacilli are wholly ignored. Accordingly, those familiar with the complex character of the tuberculous process can only designate this description of these authors as a misinterpretation of scientific facts. One or two illustrations will best explain my meaning, and will prove also the artificial and misleading system of classification adopted in describing the forms and stages of pulmonary tuberculosis.

First, it is stated "cases of consumption may be roughly divided into four classes: Class I. Those patients who become infected and recover without knowing that they have been infected." In an earlier paragraph it is stated that "practically every man or woman over 35 bears evidence of having suffered from tuberculosis." I ask whether it is justifiable to describe cases in "Class I" as cases of consumption? Such a loose and unscientific definition cannot be too strongly condemned by those who distinguish between healthy individuals and those who are consumptive. Next, I have seen not a few cases in which to-day "the dose of poison absorbed is not beyond the capacity of the defensive forces," and to-morrow, as the result of some trifling accident or complication, "Class I" suddenly passes into "Class IV." This is not the result of a progressive intoxication, but due to an extension of infection. For example, I have seen several cases of latent pulmonary tuberculosis producing no symptoms to attract attention, and yet within three weeks the patients, adults too, have died of tuberculous meningitis. In a smaller degree, and by less severe extensions, "Class I" may pass into "Class II," and even into "Class III," not by virtue of the progressive intoxication, but because the infection has spread discontinuously by the lymphatics or blood vessels to near and distant parts. Thus, too, slowly and even without attracting attention, the third stage of the disease may be reached without any symptoms of poisoning such as the theory of these writers presupposes.

This loose and inaccurate classification of the forms of consumption arises from an attempt to prop up the cause of sanatoriums, which are tottering to their fall, while it may entirely mislead all except those who are intimately acquainted with the variable and uncertain nature of the tuberculous process. The writers go further, and, without offering a tittle of evidence, seek to induce their readers, medical and lay, to believe that those of us who use tuberculin for treatment at tuberculin dispensaries obtain our successes by treating only classes hypothetically designated as "Class I" and "Class II," which would "recover without treatment or by taking a holiday at the seaside." They themselves assume the very point—the result of treatment—which it is necessary to prove. I challenge any one who has studied pulmonary tuberculosis to tell us how long a particular case will belong to

"Class II." There may be no "unsanitary or deplorable conditions, no lack of food," and yet the disease may rapidly hurry its victim into "Class III," because the virulence of infection is a factor which cannot be estimated, eliminated, or disregarded. Thus, according to this classification, one and the same case might to-day belong to "Class II" and would "recover if given a holiday at the seaside"; but to-morrow it would be "Class III" and "need careful treatment in a sanatorium"; and next week would belong to "Class IV" because "he is going to die, whatever may be done for him."

This is the sequence of events which too frequently follows upon a system of diagnosis and treatment which dispenses with tuberculin. The dominant error in this classification is that the issue of treatment determines the diagnosis. The wise physician desires rather to modify the prognosis by adopting treatment that will bring back the victims of the disease from "Class IV" to "Class III," and even to "Class II." If he can even occasionally succeed in doing this, he will frequently succeed in bringing cases in "Class III" to "Class II," and even "Class I"; while he rarely, if ever, fails to prevent cases in "Class II" passing into "Class III" or "Class IV."

I have urged in my Weber-Parkes essay that the worse the prognosis, the better the method that succeeds in saving the victims of the disease. Nothing has convinced me of the value of tuberculin treatment so much as the extraordinary successes I have obtained in cases in II-III and III stages of the disease even when complicated with tuberculous ulceration of the larynx. These results were published in the BRITISH MEDICAL JOURNAL of November 26th, 1910. I challenge any laryngologist to produce a similar series of successful results obtained by any other method.

If one can restore to health, by means of tuberculin, victims in these advanced stages of the disease, with the worst of all complications—tuberculous ulceration of the larynx—a *fortiori* it becomes a relatively easy task to obtain successful results in the earlier stages of the disease. I have obtained these successes in cases that would be rejected by any sanatorium, and I have obtained successes in Stage II of the disease which have not been approached in any records of sanatorium treatment. In Stage I of the disease my results have been such that I unhesitatingly endorse the dictum of Professor Koch that in Stage I tuberculin cures pulmonary tuberculosis with certainty. It is for this reason that I must deplore the *ex parte* statements of men who have not themselves consistently, persistently, and courageously employed tuberculin in treatment, and I earnestly demand that a searching investigation of actual facts and authentic observations should be instituted by unbiassed and competent authorities.

There are two other important points that need discussion. These authorities speak of the limitations of tuberculin. There is no remedy known which has not limitations. Injections of tuberculin cannot restore life to a dead man, and cannot always save a dying man. Tuberculin also has no effect except upon a tuberculous process. No one has more persistently pointed out that tuberculin may even do harm when other infectious organisms have found entrance to a tuberculous lesion. I insisted upon this point long before Sir William Osler paid any special attention to the part played by mixed infections in the later stages of pulmonary tuberculosis. Mixed infections generally appear late in the course of pulmonary tuberculosis, and one of the best ways of dealing with these mixed infections is to anticipate them, and by means of tuberculin produce that state of fibrosis in the tuberculous lesion which not only checks the extension of the tuberculous disease in the lungs, but also forms the best barrier against the invasion of the disease by these secondary organisms. Thus, the judicious use of tuberculin in the first and second stages of pulmonary tuberculosis is the best way of obviating this particular limitation of tuberculin treatment.

I am quite convinced that the routine use of tuberculin in the second stage of pulmonary tuberculosis is the best means of preventing mixed infections in all forms of open pulmonary tuberculosis. As for any other limitations which these authorities are careful enough not to define or describe they must tell me what they are before I can

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admit their existence. Personally, I know no limitations to the use of tuberculin in palmonary and other forms of tuberculosis provided the disease has not wrought so much destruction of tissue that recovery could only be brought about by a miracle.

I have already said, and I am quite earnest in my statement, that I know no contraindication to the use of tuberculin except despair. Within the last year I have treated at the tuberculin dispensary more than 100 cases of pulmonary tuberculosis in all stages, and apart from the cases of mixed infections, always in an advanced stage of the disease, I have been unable to find any limitation circumscribing the use and value of tuberculin. To be quite accurate, I am ready to admit that it is not wise, except with certain precautions, to use tuberculin in cases of well marked renal disease. Renal disease is in itself, sooner or later, fatal, and there is not much object in curing a tuberculous lesion when there already exists a disease which in itself is likely to be fatal.

The other point I wish to discuss is the need for "constant, skilled medical supervision." Again, these authorities do not define what they mean by "constant, skilled medical supervision," but I take it that, imbued with the idea that "auto-inoculation" by graduated exercises is the cardinal principle of treatment, they mean that the physician must constantly watch this empirical system of introducing into the circulation a sufficiency of poison from the diseased foci to stimulate the tissues to produce a sufficiency of antibodies to neutralize the effects of the disease. I am convinced that by the system of graduated doses, which can be measured with mathematical accuracy, by the subcutaneous injections of tuberculin, there is not the same need for "constant medical supervision." In our system experience has shown that it is enough to record the temperatures every three hours, and to weigh the patients at regular intervals, in order to work out the salvation of the victim. We teach even our youngest patients to take their own temperatures, and we instruct them or their parents to keep the patient quiet if the temperature rises. By working on this system for many years in Australia and for more than a year in England, where I have treated nearly 200 patients, we have found no difficulties which could not be surmounted.

It is too often forgotten that in dealing with tuberculosis among the poor it is necessary to reduce expense to a minimum; and if there is little risk in carrying out this system at a cost of at most £2 for every case treated, I see no reason for spending another £30 a case in order to secure this "constant, skilled medical supervision." If this money is given to us, we should spend it, not on this "skilled medical supervision," which does not greatly benefit the patient, but rather upon trying to introduce permanent improvements in the homes of the poor—not merely in bricks and mortar, but in supplying the ordinary necessities and comforts of life. It is only too clear to me that this "constant medical supervision" is much over-rated, because for at least ten years it has been my custom to treat well-to-do patients at a distance—even in the late stages of the disease—and I cannot remember an instance in which these patients were any the worse because I was not at their elbow every hour of the day to tell them to do this and not to do that. In fact, by this system of training one teaches the people themselves to understand the importance of carefully watching the course of the temperature and the value of improving their health and nutrition by a proper and regular system of dietetics, which can be controlled in a practical manner by the weighing machine.

Lastly, by a proper course of tuberculin treatment, it is almost the rule that cough and expectoration cease, so that the victims themselves cease to be a danger to their friends and relations. Bandelier and others, including myself, have proved beyond all doubt that tuberculin treatment is a much more powerful factor in converting infectious into non-infectious cases than the best sanatorium treatment. This transcendent advantage of tuberculin treatment, which is admitted by all the best authorities—Turban, Bandelier, Koch, Cornet, Petruschsky, Spengler, Moeller, Pfuhl, Krause, Behring, Mitulescu, Roepke, Rembold, and myself—seems to be given no weight, and yet it is perhaps the greatest advantage of all. Such a system benefits not merely the individual victim, but mankind.

THE FRENKEL SYSTEM OF EXERCISES FOR TABES.

By J. G. GARSON, M.D.,

PHYSICIAN TO THE EVERSLEY SANATORIUM, HANTS.

THE following case is of interest as illustrating the beneficial effects which result from the systematic practice of the exercises designed by Dr. Frenkel of Heiden for restoring the power of co-ordinate movements in persons affected by tabes dorsalis. It shows how a person who has been reduced to a state of almost complete invalidism may by this means regain the power of locomotion so as to be able to live a comfortable and useful life.

A. B., aged 39, was admitted on April 30th, 1908, suffering from tabes dorsalis in the ataxic stage. He had contracted syphilis fourteen years previously, from which he had suffered severely, and had treatment continuously for about three years. Neurasthenic symptoms occurred in 1905, which were soon afterwards followed by girdle pains, bladder symptoms, and difficulty in walking. Tabes dorsalis was definitely diagnosed by Dr. Kissen Russell, by whom he was treated for a time. The ataxic symptoms had gradually increased in severity till he was able to walk only by aid of two sticks. When I first saw him he had a very pronounced ataxic gait and frequently fell, so that it was no longer safe for him to walk in the streets alone. The knee reflexes were entirely gone, Romberg's sign was very marked, and the Argyll Robertson pupil present. The girdle pains and bladder trouble continued, and varied in severity at different times. Ocular symptoms did not then trouble him, and he had fair control over the sphincter ani. The muscles of the lower limbs were in good condition, but slow of action. There was some increase in the range of movement in the joints and some degree of hypotonia, likewise some loss of sensibility of the skin, muscles, and joints, particularly the knee. The symptoms were rather more marked on the left than on the right side. Owing to the falls he had had he was very nervous in walking. He was utterly unfit to follow any pursuit, and the prospect in life before him was very unfavourable.

As the patient had been treated for some time for the disease, which appeared to have remained, for some months at least, *in statu quo*, the most pressing object was to alleviate the disablement in locomotion resulting from the destruction of nerve tissue which had already taken place. To this end Frenkel's exercises were employed. The first thing done was to teach the patient the various movements of the body required to enable him to rise from and sit down on a chair, as a sound person does instinctively and generally without knowing how he does it. The successive movements included in these acts had to be learnt one by one and repeated frequently with the attention concentrated upon them by the patient till he was able to regain the power of performing them in the ordinary manner. The patient was likewise set to do walking exercises daily along a track 21 cm. broad (8½ inches). At first little regard could be paid to the length or regularity of the steps taken. How to advance one foot before the other, to gain sufficient control over his limbs in order to be able to place his foot upon the track at each step, and to correct the outward rotation of the legs while doing so, occupied all the patient's attention at the beginning. Not only had he to be taught in their proper sequence the various physiological movements of the body required to perform the mechanical act of progression, but he had also to learn to forget the faulty methods of moving his limbs which he had developed during the course of the disease. Progress was necessarily slow at first, but little by little improvement took place as the movements were repeated day after day with the attention concentrated upon them. After a time it became possible for the patient to take steps of a given length (30.5 cm.), and later on he learned to take steps of shorter and of longer lengths, and various combinations of steps in the manner laid down by Frenkel. Finally, practice was conducted on Frenkel's narrow track, 11 cm. wide.

After four months' treatment in the sanatorium he went to a private residence in the country, where he continued to practise in the garden the exercises which he had been taught under my supervision. Several months later he wrote to me in 1909 saying:

Now I can assure you that the progress I have made has quite surpassed my most sanguine expectations. I have entirely discarded the use of a stick in the house; urinary troubles are vastly improved. My strength is increasing, especially in the legs; the calves have become firmer and the muscles under control. Outsiders have noticed the improvement even more than I have.

I have at intervals heard from him since, and the improvement which he enthusiastically describes has been fully maintained. About two years ago he was married, and has in no way suffered any set-back in consequence.

The case is one which corroborates very forcibly the teaching of Frenkel with respect to the ataxic condition. As long as a certain amount of sensibility exists in the muscles and joints, systematically performed movements, frequently repeated with the attention concentrated on the acts, produce certain impressions on the neurones still unaffected by the disease; these impressions are accumulated until their collective intensity equals that of a stronger but less frequent stimulus, and are capable of being reproduced by the central nervous system. Naturally, the greater the loss of sensation the more difficult and prolonged will the treatment be, but in Frenkel's practice it has been rare to find a case in which the sensibility of the muscles and joints has been so reduced as not to be capable of great improvement. In Frenkel's clinic I have myself seen patients gradually recover their powers of locomotion who, when they began the treatment, were quite incapable of walking, and only able to practise the exercises designed for bedridden persons.

The results of the Frenkel treatment are so excellent that to carry it out to best advantage I have had constructed here a permanent plant fully equipped with all the outfit Frenkel recommends for the purpose. The exercises designed to be performed in bed or on a couch are done by patients separately, but the walking exercises are best done when three or four patients are simultaneously on the track and practise them alternately, as there is then a spirit of emulation and intentness of purpose aroused which has a very beneficial influence on the result.

SEVENTY-NINTH ANNUAL MEETING

OF THE

British Medical Association.

Held in Birmingham on July 21st, 22nd, 24th, 25th, 26th, 27th, and 28th.

PROCEEDINGS OF SECTIONS.

SECTION OF ODONTOLOGY.

Professor F. E. HUXLEY, M.D.S.Birm., President.

PRESIDENT'S INTRODUCTORY REMARKS.

THE President in opening the proceedings of the Section stated that the relation of the teeth to public health would form the leading theme of the papers and discussions of the Section throughout its session, and that on one day a joint meeting had been arranged with the Section of State Medicine and Industrial Diseases. He spoke also of the limited opportunities at present afforded for scientific research in this branch of medicine, and of the growing responsibilities of dentistry; also of the advantages of meetings like the present, where the specialists' views were enlarged by coming in contact with general practitioners and physicians. They would be obliged to avoid questions which might arise concerning the large amount of unqualified dental practice, as political topics were not admissible in the Sections.

DENTAL DISEASE FROM THE STANDPOINT OF THE PHYSICIAN.

By R. J. ERSKINE YOUNG, M.D.Edin., L.D.S.Edin.

Of late years considerable attention has been drawn to the deplorable dental condition of elementary and industrial school children. From a medical, from a dental, yes, and from a national standpoint the need is so great and the problem so big that, in spite of the establishing of dental clinics in certain places—for example, Cambridge, Liverpool, Kettering, and other towns—its solution is still afar off, and only the fringe of the subject has been

touched. I propose to deal this morning with only one of its aspects, and I have come to Birmingham to ask you a question—namely, What is your everyday attitude to the whole question of dental disease and its far-reaching consequences? Medicine is a huge subject, and the ordinary medical man finds it almost impossible to keep in touch with its many aspects.

In my medical days I gave some special study to neurology, to insanity, to chest disease, diseases of children, and gynaecology. But I frankly admit that odontology was conspicuous by its absence. During the time I was engaged in medical practice I suppose I did not look at the teeth of six patients in six years.

Is it a case, gentlemen, of "tu quoque"? Do "you also" plead guilty in this respect? You are perhaps interested in gynaecology, or you like eye work, or you have a "bent" towards the chest, or possibly you are a keen heart man, and take special interest in the detection of a faint post-diastolic murmur. But dental disease and its results—what of them? "Well," you reply, "of course the teeth are very important, now that I come to think of it, but such cases find their way to the dentist." Yes, but you do not emphasize the necessity for treatment, and your patients may or may not attend to the matter, and they suffer accordingly. Now these remarks do not apply to many of the medical profession, but there are some to whom the following clinical-pictures may be useful. Let us say you have a certain good family as patients. The daughter of the family has been anaemic for long. The blood tonics you have prescribed are legion, and yet your patient does not get well. She still has a "bruit de diable," and giddiness, headache, and lassitude are complained of. You try a new tonic, elegantly written in the classic language, and while you replace your stethoscope in your hat you tell her mother that you think she is better to-day. You bid her adieu, step into your brougham, take up the *BRITISH MEDICAL JOURNAL*, and at once become absorbed in the report of the recent annual meeting at Birmingham, and especially in the proceedings of the Odontological Section. You have paid your visit. Excuse me, are you sure you have? for you quite forgot that your patient has oral sepsis, and you did not even glance at her teeth.

Those of you who are Edinburgh graduates or licentiates will be familiar with the story of the woman who was asked if she had any children. What she manifestly wanted to say was that she was a joyful mother of only two instead of the desired number of six. What she did say was that she had no children to speak of. If you had looked into the mouth of your anaemic patient, you would have found that she had "no teeth to speak of." (It is a useful habit, gentlemen, to think in parallel.) A septic mouth, carious teeth, with perhaps a discharge of pus here or there, and chronic auto-intoxication. An early recognition of this condition on your part might have resulted in a more speedy cure, for I am very certain that an impoverished condition of the blood is at least aggravated (I might almost say caused) by oral sepsis. Take another case. A mother tells you that Mary has had a bad night with toothache but in the morning the pain went, and so did the child—to school. A year later Mary has developed enlarged cervical glands, and has got thinner, and is worried by a cough at night. You tell the mother, with your best professional manner, that you fear the condition may be tuberculous, and you tell yourself that you are more than sorry that you did not examine the child's mouth at the time. What is the life-history of that case? Toothache due to acute pulpitis, death of the pulp, septic pulp, suppuration, enlarged cervical glands, and tubercle has gained entrance to that child's system. You propose removal of the glands under chloroform, which may or not cure the condition, and a lifelong scar may be left. Gentlemen, how about that attack of acute pulpitis?

And what of cases you see by the score of long-standing atonic dyspepsia, and of gastric ulcer? Have you ever considered the relationship between a diseased, and therefore a defective, masticating surface, oral sepsis, and appendicitis, aggravated by the strain and stress of life, hurried meals, and bolted food? I hold that if appendicitis cannot be actually traced to diseased teeth and oral sepsis, the latter is at least a predisposing cause. When you suspect appendicitis, I earnestly ask you to give the state of the mouth much more than a passing thought.

Have you had any cases recently of anxious enteric? Your patient is comatose; the mouth is dry and very septic; the lips are cracked; the teeth are covered with sordes, and your patient is busy picking the bedclothes. Your one thought is, "Will these ulcers rupture?" or, "Can I stop this bleeding?" but you do not ask yourself, "Can I cleanse this mouth?" I know one man, my friend Dr. Halton of Liverpool (and let us hope he is far from being the only one), who lays special stress on the cleansing of the mouth in enteric cases on account of the risk of secondary infection of the parotid; and I do not think there is a single man here who will deny that the bowel condition is bound to be prejudicially affected by intense oral sepsis.

Speaking broadly, is any disease so common as dental caries? Tuberculosis is rife, but dental disease is infinitely more so.

Can you explain the remarkable attitude of the ignorant public towards any one who might speak to them about their teeth? Even to their doctor their position is: "I'll consult you when I am ill, or in pain; if I have a cough I'll ask you to prescribe; but my teeth are my own. I know best about them, so hands off, please." It does not strike them that their cough may be due to tuberculosis, and that the tubercle bacillus may have gained entrance by way of their carious molars. The man in the street is at least forty years behind the times as regards his conception of dentistry of to-day and the malign influence of dental disease on his general health. As observed by me in a paper written last summer, and discussed before the British Dental Association, his ignorance is monumental. For instance, if he has had a cavity filled in one of his teeth, and the filling, in spite of careful preparation of the cavity, comes out owing to fresh decay, then, says he, "Oh, my dentist's work is faulty!" This is the opinion even of educated people, so great is their ignorance.

How are we to educate them? Much could be done if we had a sympathetic and enlightened press; and I wish the press were represented here to-day to hear me say so. The press is too willing to allow space for the publication of "copy" that would be much better left out, though I know a great Liverpool daily which refuses to condescend to any such thing. What a boon it would be if a man could take up his pipe and his evening paper and have his eyes opened, say, by a short article dealing with the point just referred to—the connexion between diseased teeth and tuberculosis. Speaking to the Salop Branch of this Association, Dr. Wheatley, of Shrewsbury, said he considered dental caries, from the point of view of the physical well-being of the nation, probably the most important subject that had ever been brought before it. It seems to me that this disease and consequent oral sepsis strikes at the root of our national health and national stamina. A proper conception on your part of the relation between diseased teeth and the general health will assist you to give a more hopeful prognosis, and will militate in favour of successful treatment.

Since writing this paper my attention has been called to an able address delivered by Dr. John Hunter, in October of last year, to the students studying at McGill University, Montreal, on this very subject of oral sepsis. I am glad to find that he is a strong believer in the connexion between the neglect of the mouth and disease of the body. He freely speaks of "septic anaemia." The sum total of ill effects which oral sepsis produces is greater in his observation than any other single factor in medicine. Preventive medicine has done an enormous amount for the public health. I believe I am responsible for the term "preventive dentistry." These two words convey much to my mind, and modern dental surgery will do an ever-increasing amount in assisting to prevent disease.

What is your idea of dentistry of to-day? Are you aware that the L.D.S. has to complete a course nearly as long as medicine, and the examinations are difficult and comprehensive? This qualification should be compulsory to all desiring to practise dentistry, even including medical men. Do you, the medical profession, still labour under the fallacious idea that dentistry is merely mechanical? Are you aware that it involves not only a knowledge of anatomy, physiology, pathology, and surgery, but also a minute knowledge of these subjects so far as they apply

to dentistry? Do you know that all dental operations, if properly carried out, are performed on the lines of modern surgery? And now, if I have helped you to realize a tithe of what modern dentistry is, I ask you to do your part, each of you individually, in educating your patients. We have begun with the children by means of dental clinics, and I hope to arrange for the delivery of popular lectures to poor children and their mothers on the care of the teeth and the effect of neglect of them.

And what of education of the Government? Shall we ever get an enlightened and therefore sympathetic Government? So long as they do not arrogate to themselves title, any one may practise medicine or dentistry; and so long as the chemist is qualified who *sells* the poisonous anaesthetic, any butcher, baker, or candlestick-maker may actually *administer* that poison, and if the patient dies under the administration the jury say of the administrator, "Poor man, he wasn't qualified; what else can we expect?" and they return a verdict of death by misadventure and express sympathy with the widow. And yet the Home Secretary is not wholly convinced of the necessity for legislation as regards this question. Now, though of great interest in themselves, these are matters on which I do not invite discussion, inasmuch as the attention of the meeting might be thus diverted from the main issue.

One other point and I shall close. I think I hear a medical man say, "It is only natural that you should want us to tell our patients to have their teeth preserved," and you hint that our object is financial in nature. I shall prove it is not so, for, if *care* of the teeth is in our favour financially, *neglect* of them is still more in our favour. Like preventive medicine, our object is the improvement of the national health and the prevention both of dental diseases and the diseases resulting from it. Hence my plea for a closer union between the professions of medicine and dentistry. I wonder if I have succeeded in broadening your ideas as regards the latter?

When your Secretary asked me to read a paper at this meeting I was informed that politics were forbidden. I am going to disobey! Mr. Chamberlain has asked us as a nation to *think imperially*. In my turn I ask you as a profession to *think dentally*. And if I have enabled you to take a larger, a more comprehensive, because a more sympathetic, view of the whole question of dental disease and its consequences, especially in relation to the public health, this paper will not have been written in vain.

DISCUSSION.

Sir VICTOR HORSLEY (London) said that the present moment was one of urgent importance for the nation and dental profession. The British Medical Association, having recognized from the first that the care of the teeth of the elementary school children was of the first national importance, had continuously pressed on the Government (see SUPPLEMENT, July 1st, 1911, p. 24) the urgent necessity of providing in every school clinic a dental department. If the British Medical Association and the British Dental Association together forced the hands of the Government, as he believed they could in co-operation, the nation would immediately realize that a prominent cause of physical deterioration had been removed. He suggested that probably the best course would be for the two professions to urge the establishment of combined clinics, and that this plan was the most economical as well as efficient.

Mr. C. EDWARD WALLIS (London) quite agreed with Sir Victor Horsley on the value of a resolution calling attention to the paramount necessity of attending to the teeth of school children. The great difficulty encountered was in converting the members of education committees. Dental hygiene lectures were given to children, to parents, and even to teachers, but the people who needed them most were the members of these committees, who seemed quite unable in many instances to realize the ultimate benefits that would accrue to the community if the months of school children were made healthy. At the present moment a considerable fraction of the school population was so afflicted with oral sepsis and its concomitants as to be unable to profit by the knowledge that the most earnest teacher sought to put into them. It was the business of the dental profession to enlighten the community on the matter.